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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,353	03/25/2005	Martin C Rosner	US020357US	2542
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EXAMINER				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/529,353

Applicant(s)

ROSNER ET AL.

Examiner

IZUNNA OKEKE

Art Unit

2432

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/CD)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/18/2010 has been entered.

Response to Arguments

Applicant's arguments filed 03/18/2010 have been fully considered but they are not persuasive. However, the rejection based on non-statutory double patenting has been withdrawn.

With respect to amended claim 1, applicant argues that the Lundkvist does not teach "preparing a first response at the target node prior to receiving any part of a query from the source node". The disclosed reference (Lundkvist) teaches this limitation as was explained in previous action of 10/20/2009. In Para 34 of Lundkvist, a first signal 'X' is sent from a source (Object 1) to a target (Portable Unit) and in response, the target sends 2 signals (Z, Y2) to the target. The target first sends the signal 'Z' back to the source immediately upon receiving the 'X' signal which denotes that the response signal 'Z' was prepared before receiving the query signal 'X'. The signal 'Z' is prepared by the control unit 70 and it is not a function of the 'X' signal (preparing the 'Z' signal response doesn't require processing of the 'X' query). According to Para 34, the signal 'Z' is sent upon receipt of the 'X' signal and at a further time after the 'X' signal has been processed, then the second signal 'Y2' (which is a function of 'X') is sent to the source.

Applicant further argues that Fig 3 which Para 34 refers to shows a sequential process wherein 'Z' is sent after a time period from the receipt of 'X'. As was explained in the last Office Action, the only measured time in Fig. 3 is T2 which is the time between the sending of 'X' and receipt of 'Z' at the source (this time is measured at the source). There is no disclosure of a sequential time measurement at the target. The second box being below the first box at the target is for illustrative purpose and doesn't denote a sequential time lapse. Also, with the second embodiment of Lundkvist's invention, there is no disclosure by Lundkvist that the 'Z' response is sent at a later time (as was positively recited for the 'Y2' signal) and for the purpose of proximity detection, the first response signal 'Z' (which has to be prepared beforehand) has to be sent immediately upon receipt of the 'Y' query.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action

1. Claims 1-7, 11-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Lundkvist (US-2003/0184431).

a. Referring to claim 1, 11 and 18:

Regarding claim 1 and similar claims 11 and 18, Lundkvist teaches a method of determining proximity of a target node to a source node, comprising: preparing a first response at the target node prior to receiving any part of a query from the source node (See the response to argument and Para 34... response (Z) sent immediately upon receipt of the query (X) denoting that the response signal has been prepared before the receipt of the query) ; communicating the query from the source node to the target node; communicating the first

response from the target node to the source node, immediately after the query is received and before the query is processed at the target node; receiving the first response at the source node (See the response to argument and Para 34 teaches communicating a query (X signal) from a source node to a target node and communicating a first response (Z signal) from the target node to the source node and receiving the Z signal response at the source node); processing the query at the target node to produce there from a second response that facilitates a verification of the target node and its first response; communicating the second response from the target node to the source node (Para 34 teaches processing the signal to produce a second response (Y2 signal which is function of the query and the first response) which is sent to the source node); determining a measure of communication time between communicating the query and receiving the first response; and determining the proximity of the target node based on the measure of communication time (Para 34 teaches a time T2 which is measured from the transmission of the query (X signal) to the reception of the first response (Z signal) wherein the proximity of the target node is determined based on comparing the time T2 to a predetermined value).

a. Referring to claim 2, 12 and 19:

Regarding claim 2 and similar claims 12 and 19, Lundkvist teaches the method of claim 1, wherein the query and at least one of the first and second responses correspond to at least a portion of a cryptographic key-exchange protocol (Para 29 and 34 teaches the signals corresponding to a cryptographic key-exchange protocol such as asymmetric key pair cryptography).

a. Referring to claim 3, 13 and 20:

Regarding claim 3 and similar claims 13 and 20, Lundkvist teaches the method of claim 2, wherein the key-exchange protocol corresponds to a Needham-Schroeder key-exchange protocol (Para 29, Line 12-14 teaches a symmetric key encryption which is a type of Needham-Schroeder protocol can be used in the key exchange).

a. Referring to claim 4, 14 and 21:

Regarding claim 4 and similar claims 14 and 21, Lundkvist teaches the method of claim 1, wherein the query and at least one of the first and second responses correspond to at least a portion of an OCPS protocol (Para 29 and 34 teaches the first and second response corresponding to an authentication stage, a key exchange stage, a key generation phase and a data transmission phase of the OCPS protocol).

a. Referring to claims 5, 15 and 22:

Regarding claim 5 and similar claims 15 and 22, Lundkvist teaches the method of claim 1, wherein the query includes an encryption of an item based on a public key of the target node (Para 29 and Para 31 teaches the encrypting identity information and the random number based on asymmetric key pair cryptography such as the public key of the target node), and the processing of the query includes decrypting the item based on a private key of the target node, for inclusion in the second response (Para 29 and Para 34 teaches the portable unit decrypting the item based on asymmetric key pair cryptography).

a. Referring to claim 6, 16 and 23:

Regarding claim 6 and similar claims 16 and 23, Lundkvist teaches the method of claim 5, wherein the first response includes a random number, and the processing of the query further includes encrypting the item and the random number using a public key of the source node to

form at least a portion of the second response (Para 34, teaches the first response which includes a random number and Para 29 teaches encryption of all responses sent between the nodes. Para 34 the second response Y2 being a function of the first response which includes the random number and the object ID).

a. Referring to claims 7, 17 and 25:

Regarding claim 7 and similar claims 17 and 25, Lundkvist teaches the method of claim 5, wherein the first response includes an encryption of a random number based on a public key of the source node (Para 34, teaches the first response Z as an encrypted signal comprising the first information which consists of a random number).

a. Referring to claim 24:

Regarding claim 24, Lundkvist teaches the node of claim 23, wherein the second response further includes a signature of the decryption of the item and the random number, using a private key of the target node (Para 34 teaches a second response Y2 which includes an encryption of a random number based on a public key of the node).

Claim Rejections - 35 USC § 103

2. Claims 8-10, 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lundkvist (US-20030184431), and further in view of Davis et al. (US-6088450).

a. Referring to claims 8 and 26:

Regarding claim 8 and similar claim 26, Lundkvist teaches the method of claim 1, wherein determining the proximity includes comparing the communication time to a threshold value.

Lundkvist does not teach distinguishing between local and remote nodes based on the proximity.

However, Davis teaches distinguishing between local and remote nodes based on the proximity (See Davis, Col 4, Line 2-11 teaches distinguishing between local and remote nodes by determining when a device is within the proximity level).

Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify Lundkvist's system to be used in a network to determine local and remote nodes as taught by Davis for the purpose of providing security for the network by allowing access to resources within a specified boundary and limiting access to sources outside the boundary

a. Referring to claims 9 and 27:

Regarding claim 9 and similar claim 27, the combination of Lundkvist and Davis teaches the method of claim 1, further including restricting communications with the target node based on the proximity (See Davis, Col 4, Line 2-11 teaches prohibiting communications with nodes outside of the proximity perimeter).

a. Referring to claims 10 and 28:

Regarding claim 10 and similar claim 28, the combination of Lundkvist and Davis teaches the method of claim 1, further including restricting access of the target node to system resources based on the proximity (See Davis, Col 4, Line 2-11 teaches prohibiting access to resources from nodes outside of the proximity perimeter).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IZUNNA OKEKE whose telephone number is (571)270-3854. The examiner can normally be reached on 9:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571) 272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/IZUNNA OKEKE/
Examiner, Art Unit 2432

/Gilberto Barron Jr./
Supervisory Patent Examiner, Art Unit 2432